

fessor of Anatomy, and mentions his vivid recollection of the pleasant and instructive hours passed in the hospitable residence of this gentleman,—to Temminck, Director of the Rijks Museum of Natural History,—and to the other Professors of the Medical Faculty at Leyden.

The author makes frequent references to the writings of naturalists and comparative anatomists who have preceded him; to Fischer, Meckel, Burdach, W. Vrolik, Burmeister, Lattke, J. V. d. Hoeven, Temminck, Duvernoy, Schroeder V. d. Kolk, and others, and evinces that he has not come unprepared to his task. The elaborate dissection of the *Moholi* by Dr. A. Smith appears not to be known to him.

In conclusion, we may remark that we have read Dr. Hoekema Kingma's dissertation with care, and can unhesitatingly announce it as a valuable contribution to comparative anatomy, elaborated with much pains and knowledge, creditable alike to the skill and attainments of its author. In expressing a parting wish for his success, to whatever department of science he may devote himself, we may add, that we are greatly mistaken if this be his last contribution to its progress.

Introduction to Cryptogamic Botany. By the Rev. M. J. BERKELEY, M.A., F.L.S. With 127 Illustrations on wood, drawn by the author. London, Baillière, 1857.

Prior to the appearance of the present work, there was nothing in the English language which could be recommended as a satisfactory introduction to the study of the lower tribes of plants. No special treatise since the translation of Sprengel's 'Introduction to the study of Cryptogamic Plants,' the last edition of which came out in 1819, has to our knowledge been published in Great Britain. It was therefore high time that a summary introduction should be written by a native botanist, embodying the very numerous additions which have been made to our knowledge by various Cryptogamists at home and abroad. Such an introduction now lies before us, upon which an immense amount of care and trouble has been expended by the most eminent of all our Cryptogamists. Mr. Berkeley has consulted pamphlets, transactions, published collections of specimens, and papers innumerable scattered in English and continental Annals and Magazines, as well as most of the more important treatises on the different branches of his large subject. Although we think we could point out here and there works which he has passed over in silence, which it would have been well to have mentioned, even if he was unacquainted with them (for example, the works of Nylander and Massalongo on Lichens are not so much as alluded to), yet certainly, on the whole, a want of learning will not be laid to Mr. Berkeley's account. But after all, the greater value of the book consists, not in the useful and laborious epitome of other men's labours, but in the care and accuracy with which his own observations are put together, and accompanied with original figures. By far the greater part of

the plates are made from his own dissections: some few are from Thuret, Harvey, and others; but in every case the authority for the figure is added to it. In so large a field as Cryptogamic Botany, it was hardly to be expected that even Mr. Berkeley's learning should suffice for all points. Accordingly he has consulted various friends (named in the introduction and in several parts of the body of the work) on those subjects which they have specially studied. At the end is added a very useful catalogue, but (as we have intimated already) not quite so perfect as could be wished, of the principal works on Cryptogamic plants, both generally and specially.

We have now the less pleasing task of pointing out a somewhat serious, though very remediable defect in the book. It is entirely destitute of anything like a synopsis of its contents; it consists of one long chapter without any summary prefixed; and it is broken into 645 articles, without any marginal or other indication of the contents of each. The running title, "Introduction to Cryptogamic Botany," occurs 579 times without variation at the top of the pages. The reader consequently, especially the inexperienced reader, finds himself, on opening the book, in the midst of an intricate wood without star or compass. It is only by putting together the indications given at pp. 69, 81, and 424, that any person, unacquainted with the subject, can gain a faint knowledge of the subjects discussed.

We have drawn out, partly for our own profit, partly for that of the reader, a kind of syllabus of the arrangement. It will also show what proportions of the work are occupied by particular tribes. A general introduction is prefixed to the whole work, and there is a special introduction (systematic, physiological, and geographical) to each alliance.

CLASS I. *Thallogens.*

Alliance I. *Algales*, pp. 84-234.

The *Algæ* are divided into three groups. See p. 108.

Alliance II. *Mycetales*, pp. 235-420.

a. Fungales, pp. 235-372.

For the divisions of the *Fungi*, see p. 269.

b. Lichenales, pp. 372-420.

For the divisions of the *Lichens*, see p. 389.

CLASS II. *Acrogens.*

Alliance III. *Characeæ*, pp. 425-430.

Alliance IV. *Muscales*, pp. 430-507.

Includes *Ricciaceæ*, *Marchantiaceæ*, *Jungermanniaceæ*, as well as *Musci*. For the divisions of the last, see p. 469.

Alliance V. *Filicales*, pp. 507-564.

Includes *Ophioglosseæ*, *Equisetaceæ*, *Marsileaceæ*, and *Lycopodiaceæ*, as well as *Ferns* proper. For the divisions of the last, see p. 522.

We have said that the defect is remediable; and even with respect to the present edition (for we trust that such a book as this will go

through more than one edition), nothing would be more easy than to prefix a table of contents, giving the substance of each of the 645 articles.

In conclusion, we earnestly recommend the work to all our scientific friends: it is suitable to every botanical reader, besides being quite indispensable to the Cryptogamic student. Nay more, the zoologist and geologist will find not a little to interest them on the subject of their special studies.

Synopsis Plantarum Glumacearum. Auctore E. G. STEUDEL.
Royal 8vo. Stutgard, 1855.

This book will be of considerable use to botanists, from its containing full generic and specific characters of the plants known to its author, which are included in the orders Gramineæ, Cyperaceæ, Restiaceæ, Eriocaulaceæ, Xyridaceæ, Desvauxiaceæ, and Juncaceæ. Although Dr. Steudel has apparently done his best to accumulate all that is known concerning the plants of these orders, he has not been altogether successful; for much which has been written in England and also in France seems unknown to him.

It is greatly to be feared that the number of species is multiplied to far greater extent than nature will acknowledge; but in such a work as that before us, this does not seem an unpardonable fault, for each reader is furnished with the means of judging for himself.

Previously to the issue of this book, we were obliged to content ourselves with the very imperfect account of the Gramineæ afforded by Kunth in his 'Enumeratio,' and have therefore much cause for thanking Dr. Steudel for this Synopsis.

Work in the Press.

Mr. P. H. Gosse has in the press a work on Geology, in which he endeavours to set aside the conclusions of geologists as to the antiquity of the earth, by the application of a principle *wholly scientific*, which, though hitherto apparently quite overlooked, he believes to be impregnable.

PROCEEDINGS OF LEARNED SOCIETIES.

ZOOLOGICAL SOCIETY.

January 27, 1857.—Dr. Gray, F.R.S., in the Chair.

ON THE TRUE NAUTILUS UMBILICATUS OF LISTER.
BY AUGUSTUS A. GOULD, M.D.

In looking over the shells of a dealer in Boston (U. S. A.), I observed three specimens of an umbilicated Nautilus, which struck me